

**IN THE CLAIMS:**

Please add the following new claims:

32. (New) A method of producing measurement pulse shapes associated with code chips of a PRN code in a received signal, the method including the steps of :

over multiple PRN code chips taking measurements that correspond to samples of the received signal; and

selectively combining the measurements into ranges that span all or a portion of a code chip, the ranges being based on estimated phase angles of the samples.

33. (New) The method of claim 32 further including the step of determining an estimated location of the chip edges in a direct path signal.

34. (New) The method of claim 33 further including the step of narrowing the ranges that are associated with the chip edges.

35. (New) The method of claim 33 further including the step of changing the starting points of one or more of the ranges to selectively position the ranges relative to the estimated location of chip edges in the direct path signal.

36. (New) The method of claim 35 further including reducing the number of ranges.

37. (New) The method of claim 32 wherein the step of taking measurements includes taking measurements that correspond to inphase samples and quadrature samples.

38. (New) The method of claim 32 wherein the step of combining further includes combining the measurements to produce one or more early correlation values and one or more

late correlation values for use in correlating a local PRN code to the received PRN code and a local carrier to a received carrier.

39. (New) The method of claim 38 further including the step of producing code offset and carrier phase values for use in controlling a local code phase generator and a local carrier phase generator, respectively.

40. (New) The method of claim 32 further including the step of comparing the combined measurements with a predetermined reference shape to detect the presence or absence of interfering signals.